CLAIMS

1. An isolated polynucleotide having a nucleotide sequence comprising corresponding to SEQ ID NO: 1, said polynucleotide comprising a portion of the human *GABRB2* gene including a polymorphic site at position 1584 of intron 7.

2. The isolated polynucleotide of claim 1 wherein the nucleotide at position 1584 of Intron 7 is selected from G or T.

3. An isolated polynucleotide having a nucleotide sequence which is complementary to the polynucleotide of claim 2.

4. A PCR primer set for amplifying regions of a polynucleotide corresponding to SEQ ID NO: 1, said primer set comprising a first primer having a sequence corresponding or complementary to a sequence corresponding to SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 10 or SEQ ID NO: 12, and a second primer having a sequence corresponding or complementary to a sequence corresponding to SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 9, SEQ ID NO: 11 or SEQ ID NO: 13.

5. A method of predicting whether an individual is more likely to suffer from schizophrenia comprising the identification of DNA sequences corresponding to one or more SNPs selected from the group consisting of: SNPs at positions 1584, 1803, 2103, 3106, and 3434 of intron 7, and position 1265 of intron 8 of the human *GABRB2* gene on one or two of the individual's chromosomes, or other genetic markers in the same haplotype as, or in linkage disequilibrium with, one or more of said SNPs.

6. The method of claim 5 wherein the presence of a C at position 3106 of Intron 7 indicates that the individual is more likely to suffer from schizophrenia.

7. The method of claim 5 wherein the presence of a C at position 3424 of Intron 7 indicates that the individual is more likely to suffer from schizophrenia.

8. The method of claim 5 wherein the presence of a C at position 1265 of Intron 8 indicates that the individual is more likely to suffer from schizophrenia.

9. The method of claim 5 wherein the presence of a C at position 2103 of Intron 7 indicates that the individual is more likely to suffer from schizophrenia.

10. The method of claim 5 wherein the presence of a G at position 1803 of Intron 7 indicates that the individual is more likely to suffer from schizophrenia.

11. The method of claim 5 wherein the presence of a T at position 1584 of Intron 7 indicates that the individual is more likely to suffer from schizophrenia.

12. A method of genotyping an individual in order to determine a clinical and pharmacogenetic classification of a schizophrenia-spectrum disorder of the individual suffering from such disorder, said method comprising the identification of DNA sequences corresponding to one or more SNPs selected from the group consisting of: SNPs at positions 1584, 1803, 2103, 3106, and 3434 of intron 7, and position 1265 of intron 8 of the human *GABRB2* gene on one or two of the individual's chromosomes, or other genetic markers in the same haplotype as, or in linkage disequilibrium with, one or more of said SNPs.

13. The method of claim 12 wherein the presence of a C at position 3106 of Intron 7 indicates that the schizophrenia-spectrum disorder of the individual has a genotype that includes the presence of a C at position 3106 of Intron 7 of *GABRB2*

14. The method of claim 12 wherein the presence of a C at position 3424 of Intron 7 in either one or two chromosome indicates that the schizophrenia-spectrum disorder of the patient has a genotype that includes the presence of a C at position 3424 of Intron 7 of *GABRB2* in either one or two chromosomes.

15. The method of claim 12 wherein the presence of a C at position 1265 of Intron 8 in either one or two chromosome indicates that the schizophrenia-spectrum disorder of the patient has a genotype that includes the presence of a C at position 1265 of Intron 8 of *GABRB2* in either one or two chromosomes.

16. The method of claim 12 wherein the presence of a C at position 2103 of Intron 7 in either one or two chromosome indicates that the schizophrenia-spectrum disorder of the patient has a genotype that includes the presence of a C at position 2103 of Intron 7 of *GABRB2* in either one or two chromosomes.

17. The method of claim 12 wherein the presence of a G at position 1803 of Intron 7 in either one or two chromosome indicates that the schizophrenia-spectrum disorder of the patient has a genotype that includes

the presence of a G at position 1803 of Intron 7 of *GABRB2* in either one or two chromosomes.

18. The method of claim 12 wherein the presence of a T at position 1584 of Intron 7 in either one or two chromosome indicates that the schizophrenia-spectrum disorder of the patient has a genotype that includes the presence of a T at position 1584 of Intron 7 of *GABRB2* in either one or two chromosomes.

19. A method of drug screening for identifying drugs for treating schizophrenic disorders, the method comprising:

a) transfecting a vector into a eukaryotic expression system, said vector containing a DNA sequence corresponding to at least a portion of the human *GABRB2* gene, said portion of the *GABRB2* gene including one or more SNPs chosen from the group consisting of: I7G1584T, rs1816071, rs1816072, rs194072, rs252944, and rs187269;

b) expressing said vector in a cellular expression system;

c) adding a drug to be screened into said cellular system;

d) analyzing the expression of the *GABRB2* gene encoding $GABA_A$ receptor β_2 subunit and also analysing the expression and resultant activity of the $GABA_A$ receptor in the cellular system;

e) determining the effect of said drugs on the expression of the $GABA_A$ β_2 subunit and the $GABA_A$ receptor, and the activity of the expressed $GABA_A$ receptor in the cellular system; and,

f) identifying drugs capable of altering the levels of expression of different forms of *GABRB2* gene containing different alleles of one or more of the six SNPs I7G1584T, rs1816071, rs1816072, rs194072, rs252944 and rs187269, and genetic markers belonging to the same haplotype or haplotypes of , or in linkage disequilibrium with, one or more of these six SNPs.

20. A diagnostic kit for detecting the identity of SNPs at positions 1584, 1803, 2103, 3106, and 3434 of intron 7, and position 1265 of intron 8 of the human *GABRB2* gene, said kit comprising components for the determination of said SNPs.